



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,306	04/09/2007	Mark Verleysen	31223 00132 (F 902)	6502
25264	7590	04/01/2008	EXAMINER	
FINA TECHNOLOGY INC PO BOX 674412 HOUSTON, TX 77267-4412			LU, C CAIXIA	
		ART UNIT	PAPER NUMBER	
		1796		
		MAIL DATE	DELIVERY MODE	
		04/01/2008	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/589,306	VERLEYSEN, MARK	
	<b>Examiner</b>	<b>Art Unit</b>	
	Caixia Lu	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 01 February 2008.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 9-13 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 9-13 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____ .	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9, line 7 from the bottom of page 2, the term "activator" does not make sense. Should "activator" be replaced with --actuator--.

Claim 10 is depended on cancelled claims 7-8, which renders the instant claim indefinite. It is also noted that claim 10 directed to a system is not the same inventive group as the cancelled claims 7-8 directed to a polymerization process.

4. Claims 9-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The lengthy details of the polymerization the loop reactor system of the instant claims are not described in the specification, thus, they are new matters. For example, in the last paragraph of page 3 of the specification, a double acting pneumatic actuator 40 is disclosed, however, a "double acting

activator[sic]" not limited to a pneumatic actuator is claimed in claim 9. Applicants are urgent to map out a detail support for all limitations of claims 9-12 since the examiner is not able locate the section which support all of the limitations of the instant claims.

***Claim Rejections - 35 USC § 103***

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hottovy (US 5,183,866) in view of Burns et al. (US 5,455,314) and Tanifuji et al. (US 5,462,998).

Hottovy teaches an olefin polymerization process conducted in a loop reactor comprising conducting the olefin polymerization in the presence of a catalyst in the loop reactor to provide a polymer slurry, accumulating the polymer slurry in a settling leg, passing the polymer slurry through a PTO valve on the settling leg to a flash chamber to the location for separating the polymer solid and the diluent ( col. 4, lines 39-63). It is noted that Hottovy does not expressly disclose the type of PTO valve.

Taking the solid polymer product from the polymerization reactor through a rotating valve to minimize the interruption of the polymerization process is conventional, and such is taught in Burns (col. 2, lines 39-52) and Tanifuji (col. 3, lines 56-62; and col. 4, lines 30-43).

Thus, it would have been obvious to a skilled artisan at the time the invention was made to employ Burns or Tanifuji's valve on Hottovy's settling leg to take off the polymer product with minimize interruption to the polymerization system since such is conventional done in the art and in the absence of any showing criticality and unexpected results.

Art Unit: 1796

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caixia Lu whose telephone number is (571) 272-1106. The examiner can normally be reached from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful and the matter is urgent, the examiner's supervisor, David Wu, can be reached at (571) 272-1114. The fax numbers for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1700.

/Caixia Lu/  
Caixia Lu, Ph. D.  
Primary Examiner

1.